EM-RFO--KHLL-NONPUOPS1-2002-0006 FINAL

Non-Plutonium Operations Area I
(Name of Facility)

Balance-of-Plant
(Facility Function)

Rocky Flats Env. Technology Site Kaiser-Hill Company, L.L.C.
(Site) (Contractor)

Name: Jerry Anderson
Title: Facility Manager **Telephone No.:** (303) 966-6438
(Facility Manager/Designee)

Name: POPPELL, FRANK S
Title: RISS ESH AND Q OSE **Telephone No.:** (303) 966-6209
(Originator/Transmitter)

Name: S.L. Cunningham **Date:** 12/04/2002
(Authorized Classifier (AC))

1. Occurrence Report Number: EM-RFO--KHLL-NONPUOPS1-2002-0006

Personal Injury While Size Reducing Metal

2. Report Type and Date: FINAL

	Date	Time
Notification:	10/22/2002	16:29 (MTZ)
Initial Update:	10/28/2002	15:37 (MTZ)
Latest Update:	12/05/2002	16:18 (MTZ)
Final:	01/09/2003	08:47 (MTZ)

3. Occurrence Category: Unusual

4. Number of Occurrences: 1 **Original OR:**

5. Division or Project: Kaiser-Hill Company, L.L.C.

6. Secretarial Office: EM - Environmental Management

7. System, Bldg., or Equipment: Building 865

8. UCNI?: No

9. Plant Area: RISS

10. Date and Time Discovered: 10/21/2002 15:10 (MTZ)

11. Date and Time Categorized: 10/21/2002 16:50 (MTZ)

12. DOE HQ OC Notification:

Date	Time	Person Notified	Organization
10/24/2002	14:59 (MTZ)	Mike Wyatt	DOE/HQ

13. Other Notifications:

Date	Time	Person Notified	Organization
10/21/2002	16:52 (MTZ)	Gary Dreith	DOE/RFFO
10/24/2002	14:25 (MTZ)	Deanna McCranie	DOE/RFFO
10/24/2002	14:58 (MTZ)	Ed Kray	CDH

14. Subject or Title of Occurrence:

Personal Injury While Size Reducing Metal

15. Nature of Occurrence:

10) Cross-Category Items
B. Near Miss Occurrences

16. Description of Occurrence:

On October 21, 2002, at approximately 1500 hours, a subcontractor employee in Building 865 was injured while cutting a sheet metal ventilation fan motor housing with a sawzall for the purpose of size reducing the equipment in preparation for disposal. Three two-man teams were assigned to size reduce the ventilation system and these two-man teams were rotating use of the sawzall to minimize individual fatigue. One worker had cut half the housing when they switched and the other worker began cutting into the C-channel attached to the housing. The saw then unexpectedly kicked out of the cut and the blade struck the employee on the lower portion of the throat area. Although the injury resulted in very limited bleeding and was initially believed to be superficial, five sutures were required to close the wound.

17. Operating Conditions of Facility at Time of Occurrence:

Not Applicable

18. Activity Category:

11 - Facility Decontamination/Decommissioning

19. Immediate Actions Taken and Results:

The injured worker was outfitted with the required Personal Protective Equipment (PPE) for performing work in a Beryllium Controlled area. The worker was not immediately aware of his injury, however, his co-worker noted that the employee's Tyvex suit was cut and escorted the injured worker to the step-off pad. The worker was transported (non-emergency) to Occupational Medicine for treatment. A wound count was conducted and results were negative. The employee was treated and returned to the building with a medical restriction not allowing work to be performed in a respirator. All sawzall operations in Building 865 were curtailed until further review of the event could be conducted.

20. Direct Cause:

3) Personnel Error
A. Inattention to Detail

21. Contributing Cause(s):

22. Root Cause:

3) Personnel Error
A. Inattention to Detail

23. Description of Cause:

The direct and root cause of this event was determined to be personnel error/inattention to detail. The injured employee was an experienced craftsman who attended several recent training briefings where the safe use of a sawzall was discussed; however, in this event he was cutting toward himself with the sawzall. The individual stated in the fact finding meeting that he was holding the saw incorrectly and could have cut in a position that would have kept the saw pointing away from him or easily positioned himself where the cut could be performed safely. The employee did not remain attentive to the safety aspects of the task and did not remain focused on safely completing the cutting activity.

24. Evaluation (by Facility Manager/Designee):

This occurrence did not have any adverse affects on other site or any Building 865 safety systems. Upon the discovery of this event, Building 865 subcontractor management appropriately responded to stop work on all sawzall operations.

This event was originally categorized as an Off-normal occurrence at 1650 hours on October 21, 2002. However, upon further review by management and with

input from DOE personnel, the event was upgraded to an Unusual Occurrence at 1430 hours on October 24, 2002, due to the potential severity of the injury and the near miss determination.

25. Is Further Evaluation Required?: No

26. Corrective Actions (* = Date added/revised since final report was approved.)

1. Provide Building 865 personnel with a toolbox briefing that emphasizes hand tool safety and consequences of accidents/injuries occurring in radiological and/or beryllium areas.
Responsible Manager: Keith Pushaw
Target Completion Date: 10/22/2002 **Completion Date:** 10/22/2002

2. Provide Building 865 personnel with "hands on" training for safely cutting different materials/configurations similar to those encountered during this evolution. This should be building-specific On-the-Job (OJT) training conducted in the work area.
Responsible Manager: Keith Pushaw
Target Completion Date: 10/23/2002 **Completion Date:** 10/23/2002

3. Conduct a training briefing for Building 865 personnel to discuss proper emergency response actions/expectations during injuries or other similar events.
Responsible Manager: Keith Pushaw
Target Completion Date: 10/24/2002 **Completion Date:** 10/24/2002

4. Revise all facility Job Hazard Analyses (JHAs) to address safe use of a sawzall and include establishing proper positioning so that personnel only cut in a direction away from their body .
Responsible Manager: Keith Pushaw
Target Completion Date: 11/05/2002 **Completion Date:** 11/05/2002

5. Prepare and distribute a Sitewide Lessons Learned document to include in the Weekly Toolbox Information packet that discusses this event and addresses the safe use of cutting tools.
Responsible Manager: Bob Darr
Target Completion Date: 10/28/2002 **Completion Date:** 10/28/2002

27. Impact on Environment, Safety and Health:

There is no impact on the health and safety of the workers, the public, the environment, quality or security as a result of this occurrence.

28. Programmatic Impact:

All sawzall operations in Building 865 were curtailed until further review of the event could be conducted and corrective actions implemented to prevent recurrence.

29. Impact on Codes and Standards:

There is no impact to codes and standards as a result of this occurrence.

30. Lessons Learned:

This event clearly demonstrates the continuing need for worker attention to detail when operating cutting equipment and remaining focused on the job at all times during D&D activities. Personnel using saws should never position themselves where the saw is being pulled toward the individual.

31. Similar Occurrence Report Numbers:

None

32. User-defined Field #1:

020453 ISM=GP3-CF4

33. User-defined Field #2:

34. HQ Keyword(s):

08E--OSHA/Industrial Hygiene Issues - Injury 08N--OSHA/Industrial Hygiene Issues - Near Miss Other (Start Feb 99) 11J--Other - Subcontractor (Start July 96) 12H--EH Categories - Injuries Requiring Hospitalization

35. HQ Summary:

36. DOE Facility Representative Input:

This event was originally catagorized as an Off-Normal occurrence, management concern. Due to the nature of the incident and the potential for severe injury, DOE believed the best catagory for this event was Unusual Occurrence, near miss.This catagorization would not have occurred without DOE interaction.

This report has been reviewed by Dee McCranie, DOE RFFO Facility Representative, and found acceptable.

Entered by: RING, BRADLEY A Date: 12/18/2002

37. DOE Program Manager Input:

Approved per EM-5 memo dated 1/6/03.

Entered by: TRACY, TERRANCE Date: 01/09/2003

38. Approvals:

Approved by: Jerry Anderson, Facility Manager/Designee
Date: 12/05/2002
Telephone No.: (303) 966-6438

Approved by: RING, BRADLEY A, Facility Representative/Designee
Date: 12/18/2002
Telephone No.: (303) 966-7954

Approved by: TRACY, TERRANCE, Program Manager/Designee
Date: 01/09/2003
Telephone No.: (301) 903-2173